

the counterpart of the color of the flower of *Wislizeni* in Doña Ana County. The size of the plants of *Wislizeni* in New Mexico, Mr. Wooton told me, were only half the size of those in my garden, and I happened to have plants on hand from 30 cm. up to $1\frac{1}{2}$ meters in height.

On the 31st of July, I discovered another flower on the same plant of *Wislizeni*, which was tinted a whitish yellow, and it made me think it might be a hybrid. It is a rare occurrence in the vicinity of Phoenix to find a plant of *Wislizeni* among hundreds of *Lecontei*, and *vice versa*. The earlier flowers of this plant had petals of a similar tint, but the one last observed, on July 31, had petals decidedly yellower on both sides. Mr. Wooton advised me to make a new species of *Wislizeni*, which had *purple* flowers. After due consideration, I concluded to determine it as *Echinocactus Wislizeni*, var. **Phoeniceus**, so as to avoid errors in the future regarding these two species.

Where the zone of the occurrence of these two species is of a near approach, it is with difficulty that we can separate young plants, without flowers, one from the other, because the central spine of *Lecontei* is frequently as much hooked as in young specimens of *Wislizeni*.

It is a rare occurrence for a *Wislizeni* to sprout unless the plant has been injured, whereas in *Lecontei*, it is frequently noticed on normal plants. Taken in consideration that *Lecontei* blooms fully six to seven* weeks earlier than *Wislizeni*, a fact also observed by Prof. Toumey, why should not these two plants be considered as distinct species, as first suggested by Dr. George Engelmann, in the botany of the Mexican Boundary Report. It cannot be otherwise.

PHOENIX, ARIZONA.

FOSSIL FLOWERS AND FRUITS.—III*

BY T. D. A. COCKERELL

Sambucus Ellisiae sp. nov.

Flower 5.75 mm. in diameter; corolla with five triangular lobes, a fraction over 1 mm. long, their sides nearly straight and their

* Fossil Flowers and Fruits, I. and II., appeared in TORREYA 11: 234 and 12: 32.

apices more or less acutely pointed; anthers about or almost 1 mm. long, alternating with the corolla lobes; filaments apparently connate basally, or at least broadly attached to the corolla.

Found in the miocene shales of Florissant, Colorado, by one of the University of Colorado expeditions. Named after Mrs. Marion Durbin Ellis, who first recognized its generic position. It probably belongs to one of the two species already described from Florissant, based on leaves, but it is given a separate name, owing to the impossibility of referring it definitely to either of those species. It is a very pretty little flower, remarkable for the regular form, with the anthers exactly in place, this being due, no doubt, to the short and broadened filaments. The corolla lobes are more pointed, with straighter sides, than in the modern species known to me.

I take this opportunity to note that Mrs. Cockerell has succeeded in uncovering the basal leaflets in the type specimen of

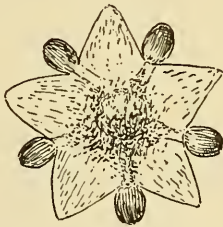


FIG. 1. *Sambucus Ellisiae*.



FIG. 2. *Phalaris* (?) *geometrorum*.

Sambucus amabilis Ckll., and they prove to be trifoliolate, as is not rarely the case in the modern species. The lateral divisions are narrow, and considerably smaller than the apical one.

Phalaris (?) *geometrorum* sp. nov.

A lemma 19 mm. long, nearly $3\frac{1}{2}$ broad near base; apex narrowly acuminate, but not awned; margin not hispid; median nervure colorless, hardly at all visible; outer nervures (one on each side) thick and dark, reddish-black as preserved, doubtless dark green in life, but pallid apically.

Found by Mr. George N. Rohwer at station No. 14, Miocene shales of Florissant, Colorado. This may not be a *Phalaris*, but it is at least suggestive of that genus. The specific name is a fanciful one, given in allusion to the parallel straight lines.

SHORTER NOTES

THE GENUS MALPIGHIA IN JAMAICA.—Heretofore we have known five species of *Malpighia* from Jamaica, West Indies, together with the apparently trustworthy report of a sixth one, namely *Malpighia incana* Mill. The species positively known to occur on the island, and also recently collected there, are *Malpighia glabra* L., *M. puniceifolia* L., *M. fucata* Ker., *M. urens* L., and *M. biflora* Poir. Jamaica is the type locality for both *Malpighia glabra* L. and *M. urens* L. Recently specimens of an additional species have come to hand. It may be described as follows:

Malpighia Harrisii Small, sp. nov. A slender shrub commonly about 3.5 m. tall, with sparingly pubescent twigs: leaves glabrous, at least ultimately so, above the petiole; blades oval, oblong, or ovate, 6–12 cm. long, obtuse to acute, or individually notched at the apex, entire, bright-green above, paler-green beneath, rounded at the base, short (5–8 mm.) -petioled: cymes sessile, many-flowered, the branches sparingly pubescent, at least when young: calyx with 6 glands; sepals oblong or ovate-oblong, about 3 mm. long, obtuse, twice as long as the glands or less: corolla rose-color, about 2.5 cm. wide, the larger petals 12–13 mm. long: androecium with 2 very large filaments: gynoecium with unequal styles, the 2 posterior ones much stouter and longer than the anterior one: drupes not seen.

In Peckham Woods, Upper Clarendon, Jamaica, collected by William Harris, September 27, 1912, III 89.

This species appears to be most closely related to *Malpighia urens*. It differs from the latter species in the glabrous, larger, broader, and longer-petioled leaf-blades, and in the larger corollas.

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A FURTHER NOTE ON THE LINNEAN HERBARIUM. Dr. B. Daydon Jackson writes me (Jan. 2, 1913) that No. "57 *Cocci-*